

GNN Feature Descriptions

1. Integrate Usability Testing Feedback

See Usability Sciences report. Additional suggestions, design enhancements, UI changes to be provided by Medior in October 1995. Product Marketing Management will prioritize the Usability enhancements in a separate document.

2. Speed parity

As defined by benchmarking metrics, at parity w/ Netscape most recent version. This should include first rendering of page, full rendering, and “apples-to-apples” graphics rendering in controlled test. May employ Server Side Compression, layout control, memory management.

3. IRC improvements

Slash commands: Support for standard IRC “slash commands” based on WSIRC client.

Enhanced UI: General improvements to current “blank page” UI for chat. Sources of improvement guidance should be usability test results and competitive products (including Ubique, Prospero, WSIRC).

4. GNN-specific newsgroups

Support for additional newsgroups for GNN users only, such as “gnn.members.helping.members”.

5. SmartMarks

Dynamically updated hotlists; as implemented by Netscape (plus enhancements as possible).

6. Spinner GNN home link

GNN “spinner” in the upper right corner of the browser also serves as an instant link to the GNN home page. This should NOT be customizable by the user, in contrast to the “home” icon on the icon bar.

7. Start in message pane

When Messenger is invoked, cursor is placed by default in the message body (not “To” pane as is current function).

8. Personal publishing: HTML 3, Netscape

Support for all HTML 3 and Netscape extensions in GNNpress-created documents.

9. Free areas

AOL-like free areas for member support, download of new versions, etc. Should closely resemble AOL functionality, with at least as clear user notices of where they are, that it's free, etc.

10. Parental control: web pages

Current “state of the standard” on password driven controls over access to web sites. May include integration of outside app (example: Cyberpatrol)

11. Win 95 1.2

Full parity with Win3.1 v 1.2 as further defined here including Shortcuts, Inbox, Internet, etc.

12. Mac 1.2

Full parity with Win3.1 v 1.2 as further defined here. Note: in subsequent versions, Mac functionality should mirror Win 3.1/95 except as noted.

13. Componentize objects

Basic foundation work to disassemble current “monolithic app” code base to allow for modular improvements to product in the future.

14. SOAF

Sign on a friend area, on the GNN website, as a menu list item, and “pushed” at user periodically within software. (see “server push of reg info”). Creates and delivers mail message to customer tracking area. Ties in with GNN member database to enable usage credits as an incentive to members.

15. Partner controls: registration

At registration, client source is identified by partner (OEM, other), and specified hotlists are “pushed” to client to replace GNN defaults. Also for icons, home pages, and title bar (“marquee areas”)

16. Versioning

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Means of hard-wiring and retrieving GNN version information within software to manage version control, customer support, etc. Must support GNN patch process.

- 17. **Email subsets of customer base**
 - Customer database driven emails, by sorts on available demographic, distribution partner, version number, sign-on date, or other information
- 18. **Referrals**
 - Ability to track and report (in aggregate) the Website from which a users linked to a particular page. In other words, how did the user get to where they are?
- 19. **Customer usage stats/tracking**
 - GNN server captures client interactions: areas visited, time spent, general interest profiles (derived), etc. Includes log audits.
- 20. **GNNdirect database auto entry**
 - Automatic entry of member database info into GNNdirect db to facilitate shopping online.
- 21. **Advertising: Banner tag support**
 - Allow for "billboard" like banners in Webpages
- 22. **Integrated look and feel**
 - Ensure consistent, integrated operations within and between modules (mail, chat, browser). User should be unaware that he/she is using different applications. The software should feel like a single application.
- 23. **Event audio prompts**
 - As in AOL, referenced audio files signal when events have happened. On sign-on and during sessions. Examples: "You've got mail," Hotlist changes, etc. ("Audio SmartMarks")
- 24. **Three state cursor**
 - Cursor changes from pointer to hourglass to selection tool (hand) depending on location on page.
- 25. **Demand redial**
 - Client automatically redials service if email send button is clicked while not connected to the service.
- 26. **Web site accessibility enhancement**
 - According to metrics TBD, high "hit rates" on most popular sites among GNN members. This could be accomplished through better/more widespread mirroring, caching, or other techniques.
- 27. **Enhanced chat**
 - Richer, more robust chat functionality including integration of Ubique and "IRC+" capabilities into a single application. Ability to cut, copy and paste between chat, email, newgroups, GNNpress, GNNworks, etc.
- 28. **Internet Phone**
 - Implementation of Internet phone functionality as a helper app (example: Vocaltech). User will be able to communicate both within GNN membership and outside. UI integration with chat functions required.
- 29. **Custom GNN list serves**
 - User ability to set up personal list serves to subscriber/requester members of GNN (only).
- 30. **User voting**
 - Voting for the most popular Web sites (e.g., Ringo).
- 31. **Enhanced search**
 - Enhancements to Webcrawler to make quicker, easier searches possible. This effort should be ongoing and include as much interaction between browser and search engine as needed to improve performance. Includes combining netsearch with local find. Longer term, could include "pushed" interface changes to browser from Webcrawler.
- 32. **Enhanced hotlists**
 - Multiple hotlists: User-definable and selectable hotlists. For example, a user with hotlists for "work" and "personal" can quickly swap hotlists as needed, move links between lists, and add current sites to single or multiple lists as desired. See CompuServe Example.

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Hotlists Configurable as Menu Items. See CompuServe example.

Favorite places: AOL-style favorite places function that allows integrated view of web., ftp, and other protocol sites in a single place. Familiarity with AOL function is desired, but more sophisticated functionality is required to extend capabilities.

Cross protocol: Regardless of protocol, sites can be added to hotlist(s).

- 33. **Email hotlists**
 - Simple function to other deliver hotlists from within browser to other users. Invokes address book, etc.
- 34. **Eliminate card catalog**
 - Remove or totally obscure current card catalog functionality. Considered too confusing to user.
- 35. **Telnet**
 - Integrate basic Telnet functionality into browser, through acquired or home-grown technology. Minimum functionality to achieve "checklist" parity with competitors. Preserve integrated, single app appearance.
- 36. **Spell check**
 - Spell checking function within email text editor, including personal dictionary additions.
 - Option to use MS spell check as alternative.
- 37. **Smart encode/Decode**
 - Seamless, transparent encoding and decoding of attachments within mail that requires no format/protocol knowledge on user part. "Custom encoding" (choose your encoding format, etc.) function for advanced users optional.
- 38. **AOL interoperability/interactivity**
 - Close interoperability with AOL mail functions, including import/translate address book, import messages, etc. Must be transparent to user; ideally, GNN "shares" AOL resources at user option, but at minimum install automatically searches for existing resources and makes needed import, configuration changes, etc.
- 39. **Right mouse support (Windows only)**
 - Support for full context-sensitive menu functions throughout product
- 40. **Multi mailboxes**
 - Support for multiple emailboxes within Messenger. For example, selectable mailboxes for "work," "personal," etc. Messages may be dragged and dropped between boxes.
- 41. **Web page "send text" email**
 - As implemented in Netscape, ability to send text (without tags) and/or URL of web page via pop-up, simple email UI. Invokes address book, etc.
- 42. **Email standards support**
 - Full MIME:** Complete support of MIME attachment "standard" including full range of data types, etc.
 - MAPI:** Support for Mail Application Programming Interface. See new Eudora implementation.
- 43. **Batch get/send/print**
 - Support for batch downloading, send, and printing of mail messages. Includes enhanced outbox, inbox, and print queue functions.
- 44. **Message DB**
 - Rearchitect mail app to include a mail database to allow for message sorting and other management functions.
- 45. **Post-it for messages**
 - Annotation tool for mail messaging, specifically forwarding and mail threads. Comments and actions can be attached to messages in "post it" fashion (see Excel for cell post-it implementation).
- 46. **Web site size tiers**
 - Ability to specify (and procure) alternative size web sites for personal use. Example: simple site could purchase just 5 MB of space, while more complex sites might require up to 50 MB.

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Server capacity issues dynamically monitored; "capacity control" functions required. Ability to tie size selected to service pricing tiers.

47. Integration: publishing tool & browser
Seamless integration within browser of web publishing capabilities. See Netscape 2.0 for ideas on implementation. Integrate NaviPress and GNNworks or create a better solution. Create ability to "snap-in" other web editing and publishing tools.

48. Server Push of Registration Information
Dynamic information "receptors" in product to receive and display updated information from GNN during installation, regular intervals in later sessions, etc.

49. Smart modem select
Seamless selection and setup of user modem during installation. (Note: no user interaction should be required to pick from list, etc.) This includes detecting user modem and setting default codes per specific modem parameters. (current selection model is limited to only 3 or 4 high-level defaults).

50. Automatic helper application inclusion via scripts
Automate the process for adding in helper apps as needed on the fly. For example, if the user wants to access a Webpage that requires a new viewer, the browser automatically selects a viewer (possibly from the GNN FTP site), asks if it should be setup, and includes it in real-time. The user does not have to stop viewing and go through a manual configuration process.

51. Multiple users on single account
As in AOL, multiple users/Netnames (5 to 10) on single account.

52. LAN and TCP/IP access support
Required changes to provide for LAN (including LAN modem banks) support through private gateways and other TCP/IP access accounts. Protocols (Ethernet, TokenRing, etc.) to be specified separately. Need methods for billing monthly and hourly.

53. Parental controls: advanced
Support throughout integrated product (including News, ftp, etc.) for password-protected access control. Could include third party utility, but must adhere to minimum acceptable industry "standard" for control.

54. More MIME types
As required by market, GNN should support AT LEAST the "state of the standard" in popular MIME types, including current unsupported types: AVI, MID, PCX, etc. More to be added as new types emerge, competitors add more, etc.

55. Adobe/PDF support
Integrated support for Adobe Acrobat (display Postscript) file format - not Acrobat reader helper app.

56. Streamed audio
Ability to dynamically download and play audio clips within browser in real time. "Multitasking" allows audio playback to begin while data continues to transfer in the background.

57. Mail security
Automatic encryption of mail messages for both GNN and outside/Internet-wide destinations.

58. Bundling surcharged websites
Client-enabled "selective admittance" to surcharged web sites that GNN subscribers may enter at no charge. Works in concert with GNN proxy server to allow entry, need longer term ability vary selectivity by type of plan purchased (Standard, Deluxe, Gold, etc.)

59. Standards support: HTML 3
Full implementation, as defined by (document, consortium, etc., TBD)

60. Standards support: Netscape extensions
Full implementation, as defined by any Netscape version released 3 months prior to a GNN release.

61. GNN extensions
To be defined. See # 107 below for one example.

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- 62. Color palette**
Advanced user control of color palette to allow management of colors in web sites. Must be sensitive to vendor controls - i.e., "overrides" for specific needs, etc.
- 63. Generalized HTML forms control**
Additional details to be provided in final spec.
- 64. Complete OLE2 support**
Including OLE automation, as defined by Microsoft
- 65. Mobile Code**
Architectural modifications to take advantage of advances in new web programming tools, (e.g., Java) that are platform independent
- 66. OLE Container**
Architectural changes to make GNN an OLE Container so that it can act as the operating system of the Internet.
- 67. Partner controls: on demand**
See #15 above; same, but "push" upon demand, in addition to registration. Hotlists, icons/home page, and titles. Hotlist push must allow for current user hotlists, including multiples, etc.
- 68. Studio in a Box**
A package of tools for third-party information providers.
- 69. Partner in a Box**
A package of tools for third-party partners, such as OEMs, allowing them to customize the portions of what their customers' experience. See #15 and #67 above.
- 70. Watermark Bug**
Branding: as with Fox or CBS network "watermark," any sites viewed through GNNworks displays a transparent GNN logo at all times. Can be disabled by the user via user preferences menus.
- 71. Additional server tracking data**
To be defined in greater detail in a separate document.
- 72. Event logging**
Major "events" (site visits, purchases, subscriptions, etc.) in user sessions logged to tracking/stats database. Tied to main GNNdirect db to allow selects for proactive mailings, etc.
- 73. Credit card security**
Ongoing work to integrate, at minimum, the state of standard encryption techniques as defined by Terisa, WWW consortium and other bodies for commercial security.
- 74. Back-end engine: content**
Enabling GNN to act as the billing agent for content priced a la carte by GNN or third-parties.
- 75. Back-end engine: hard goods**
To be defined in greater detail in a separate document.
- 76. AOL database auto entry**
Automatic entry of AOL member database info into GNNdirect database to enable AOL customers to buy good on the GNN Website without re-entering credit card data.
- 77. Advertising: marquee area(s) on client**
Allow for "billboards" in marquee area in client, dynamically updated and pushed to member software. See #15 and #67 for related information.
- 78. Restricted access: IAPs/IPs customers**
Client function to selectively allow/restrict entry for specified source customers: IAPs, IPs, etc.
- 79. Tip O' Day**
See Microsoft Office apps. At start-up, pop-up tip dialog that can be disabled by user.
- 80. Hide protocols from user**
Completely obscure protocols by intelligently managing site linkages on user's behalf. Eliminate accelerator buttons, auto-select protocol, etc.

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81. **TAPI**
Support for telephony standard, as defined by Microsoft.
82. **Speed leadership**
Minimum 10% speed/perceived performance advantage over major competitors (Netscape and MS Explorer as benchmarks).
83. **Progressive metafiles**
Additional details to be provided in final spec.
84. **Whiteboarding**
Within browser, email, chat, separate white space, etc., function to allow interactive markups during two-way (possibly Ubique-enabled) communications. Marks may be saved, retrieved, forwarded, etc. UI TBD, but must be integrated, transparently applied function, not separate app.
85. **Integrated phone**
Full integration of Internet phone functions within browser and the rest of the GNN software.
86. **Configurable toolbar, including URL icons**
At least 2 user-defined icons may be placed on toolbar. These are in addition to partner and GNN fixed icons; default is none. The size, location, and some of the items in the toolbar can be configured by the user.
87. **Parent/child UI**
Visually simple UI for displaying parent-child web pages, making page relationships easy to understand and navigate.
88. **Personal Filing Cab**
Single visual representation/storage location for all documents and favorite activities.
89. **3D Navigation/History List**
Visual navigation history list to display session “path” through sites easy to grasp. Example: 3D Cone Tree Widget.
90. **RTF text editor**
Rich text mail editor, allowing full formatting function as supported by RTF format.
91. **HTML text editor**
HTML text mail editor, allowing full Web formatting function.
92. **Basic address book management**
Innovative range of address book management functions: sorting, most used, multiple address books, etc. Must interoperate to extent possible with AOL address book functions and third-party PIMs (Personal Information Managers, such as ACT! and ECCO).
93. **Drag n drop letter icons to mailboxes**
Ability to drag letters from mailbox to multiple destinations with messenger: other mailboxes, outbox for forwarding, etc.
94. **Simple mail management**
Rules, filters, autokill; functions to apply “intelligence” to incoming mail handling. Should map closely to competitive offerings at minimum. Automated “on vacation” response to email.
95. **Address “quickfill”**
See Quicken; “guesses” full mail address as user enters first letter of names. User-override option.
96. **Fingerprinting**
Mail feature that guarantees sender and intended recipient, show viewers, edits along path, etc.
97. **Copyright clearing**
Automated copyright clearing for information used in email messages, webpages, etc.
98. **Mail security**
“Sign and seal.” Automatic encryption of mail messages for both GNN and outside/Internet-wide destinations.
99. **ISDN**

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Support for high speed connections, including architectural changes as needed.

100. Configurable disconnect time
User-definable logout limit so that a user who wants to stay on GNN all day can. Default: same as current default -- logout after 20 minutes of inactivity.

101. Hotswitch between Netnames
Ability to switch between Netnames while remaining connected to the service (i.e., without logging off and back on again). This would, for example, allow a User to check the email for all Netnames in a single online session.

102. 3D format(s) support
Integrated native support for "state of standard" 3D formats: VRML, KAW, etc. Monitor standards bodies and Netscape integration plans for guidance here.

103. Animation/Video support
Integrated native support for "standard" formats for full motion content. Likely examples are Macromedia, MPEG, QuickTime. Monitor standards bodies and Netscape integration plans for guidance here.

104. Zoom page/persistent zoom
User controls for selectively zooming pages. Should include standard settings (100%, 150%, etc.) and customizable levels. Also, preference level control to maintain zooms between sites, sessions, etc.

105. User UI controls
User can control the UI: multiple rows of tabs, configurable toolbar, configurable menu items, etc.

106. Limited state save
Persistent maintenance of screen characteristics between sessions. Includes screen size, zoom (see above), font choices, etc.

107. "Open new pane/window" tag
Create and disseminate a new HTML tag (or series of tags) that enable the creation of a new Window or pane when clicked. Beneficial, for example, when choosing to view multiple Webpages referenced in an index.

108. Expose OLE Container API
Define and publish API for OLE Container capabilities within GNN software to enable third-party support.

109. Scriptable components for OLE Container
Pre-defined (shipped with product) components for 3rd party use in creating/extending OLE Container functionality.

110. Localization
Optimize product for minimum translation efforts. Segregate menu/toolbar/other element text strings, etc. Architectural changes to support.

111. Customer feedback tracking
Simple mechanism within software and in GNN back end for capturing and funneling customer feedback. More than simple email form output; should format and categorize feedback based on qualifiers to direct comment appropriately.

112. Report mouse movements
Capture and record user cursor/mouse movements at aggregate level. Stored with other user data (above).

113. User-created newsgroups
Newsgroup creation function. Allow for creation, subscriber management, and list serves for individual users. Provide the ability to surcharge for these services.

114. Personal name spaces
Domain names (http addresses) for individual users. Formats TBD -- current thinking includes "JohnDoe.gnn.com", "JohnDoe.com", and "Doe.fam" (for the Doe family). Default: map to Netname. Also allow other choices. Ability to surcharge for this service.

115. Personal listserves

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Individual list serve function. Password-protection, subscribe/unsubscribe, etc. Also: see newsgroups above. ~~Surcharge~~, and “volume deal” in bundle with personal newsgroup functions above.

116. Hotlist tracking
Aggregate tracking and reporting on the Webpages that users are putting in their Hotlists.

117. “Clipping service”
HTML: Webcrawler/search enhancement, allowing specified content (based on user-defined rules) to be pushed as automatically generated custom HTML pages linking matching sites/pages. Dynamic updates, etc. Could be handled as “clipping hotlists.”
Also, Newshound-like search of news feeds and newsgroups.

118. Unicasting
Enable programming to individuals based on profiles and past usage patterns.

119. Multiple subscription lists
Allow the user to have multiple newsgroup subscription lists, one for work, one for home, one for hobbies, etc.

120. IMAP
Support for emerging standard that allows selective client/server download; specifically, of mail messages.

121. Advanced mail management
More robust rules and auto message handling functions. Beyond competitive offerings.
Goal: to automate receipt, filing, and response to mail inflows.

122. SLIP/PPP
Full support (at architectural level) for SLIP/PPP protocols.

123. Cable modem
Integrated support for cable modem inputs, and accompanying architectural changes to provide for higher bandwidth content.

124. Intelligent POP selection and routing
Intelligently monitor POP loads to route new users to low traffic entry points.

125. Streamed video
See streamed audio.

126. Web site UI controls
Client UI adapts to IP-specified UI controls by site. Requires developer toolkit and API.

127. Advanced state save
Total preservation of client state between sessions. See Limited state save above.

128. Dynamic columnar formatting
Additional details to be provided in final spec.

129. Style sheets
See Microsoft Word, other WP packages. User defines favored fonts, colors, borders by “level” within web pages. Support for IP “overrides.” Also see Navisoft style sheets.

130. Configurable UI: drag n drop
User can change the UI for the client by dragging n dropping different components into place.

131. Cache/thread
Additional details to be provided in final spec.

132. Visual Authoring
Similar to visual basic. Enable rapid development of helper applications.

133. Double bit char set
I. Localization support for kanji and other double bit languages. Architectural changes as required.